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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT W. WARREN JR.

Appeal 2009-009812
Application 10/767,505
Technology Center 2100

Before LANCE LEONARD BARRY, JOHN A. JEFFERY, and
ST. JOHN COURTENAY III, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

This is a decision on appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1-25. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

Invention

Appellant's invention relates generally to data storage devices. (Spec. 1). More particularly, the invention on appeal is directed to a generic data transfer interface for a data storage device. (*Id.*).

Independent claim 1

A host interface comprising:

a channel select bit encoder that asserts to a media controller one or more channel select bits indicating one of a plurality of virtual channels through which the host interface will communicate over a data bus with the media controller;

a virtual channel controller coupled to the channel select bit encoder that establishes a connection for address-less transfer between the indicated virtual channel of the host interface and a corresponding virtual channel of the media controller.

Independent claim 7

A media controller comprising:

a channel select bit decoder that decodes one or more channel select bits received from a host interface indicating one of a plurality of virtual channels through which the host interface will communicate over a data bus with the media controller;

a virtual channel controller coupled to the channel select bit decoder that decodes the one or more channel select bits and establishes a connection for address-less transfer between the indicated virtual channel of the host interface and a corresponding virtual channel of the media controller selected based on the one or more decoded channel select bits.

Rejections

1. Claims 1-4, 7-10, 13-18, and 21-25 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Iguchi (US Pat. Pub. 2002/0169960 A1).
2. Claims 5, 11, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Iguchi and Sardo (US Pat. 6,763,405 B2).
3. Claims 6, 12, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Iguchi and Hewitt (US Pat. 5,790,811).

FINDINGS OF FACT (FF)

1. Iguchi discloses a storage device 120 that includes a tamper-resistant module 121 and a flash memory 140. (para. [0040]; Fig. 2). The tamper-resistant module 121 further includes a host interface 122, a NV memory 125, an encryption processing circuit 126, and an application RAM 127 operatively connected to CPU 128, RAM 129, and ROM 130 via inside bus 123. (*Id.*). Tamper-resistant module 121 also includes a flash memory interface 124 (depicted inside the tamper-resistant module 121) that connects to flash memory 140 which is shown external to the tamper-resistant module 121 but inside storage device 120. (*Id.*).

2. Figure 2 of Iguchi is shown in pertinent part:

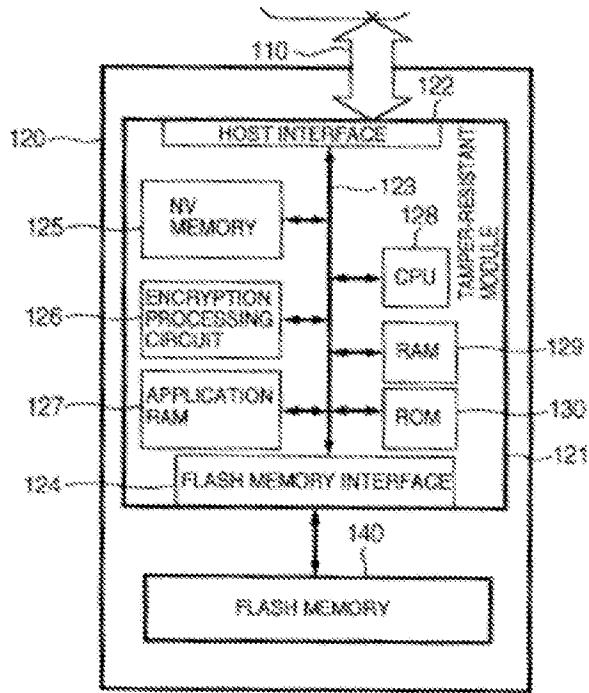


Figure 2 of Iguchi depicting storage device 120 is shown above.

3. Figure 3 of Iguchi depicting mobile terminal 103:

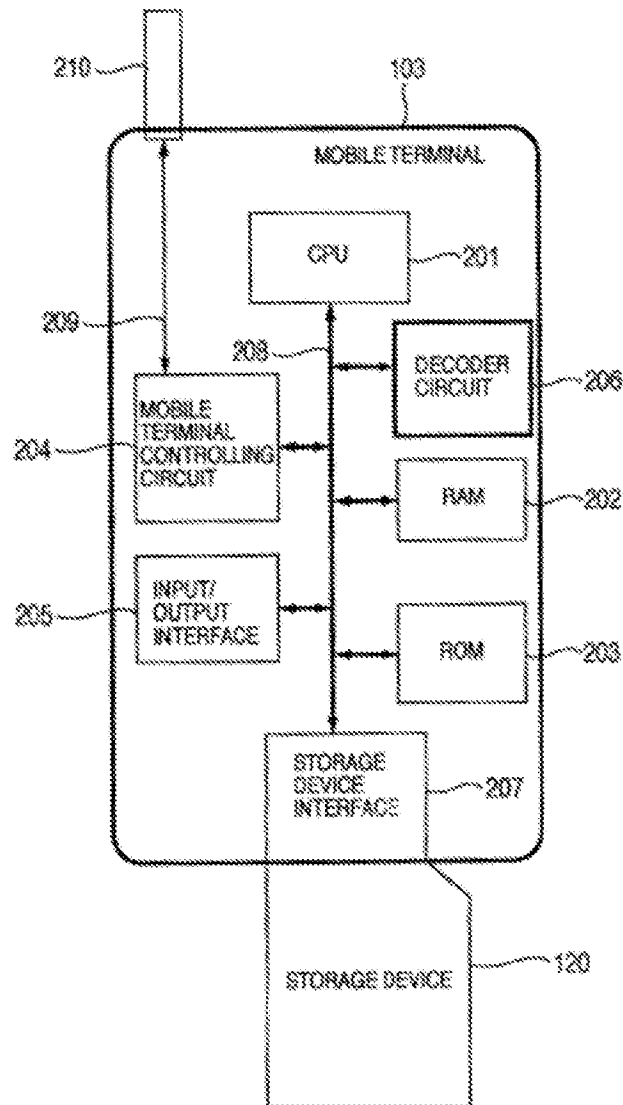


Figure 3 of Iguchi depicting mobile terminal 103 is shown above.

4. Iguchi discloses that “storage device interface 207 performs the transmission/reception of the information between the mobile terminal 103 and the storage device 120.” (para. [0058]).

Anticipation rejection

Issue: Has the Examiner met the burden of establishing a prima facie case of anticipation for each of Appellant’s independent claims by clearly mapping each disputed claim element to a corresponding portion of the Iguchi reference so as to show the claimed arrangement?

Analysis

Independent Claim 1

Based upon our review of the record, we agree with Appellant that Iguchi fails to disclose that “the host interface will communicate over a data bus with the media controller” and “a connection for address-less transfer between the indicated virtual channel of the host interface and a corresponding virtual channel of the media controller,” as recited in independent claim 1. (App. Br. 7).

In the “Response to Arguments,” the Examiner clarifies that the claimed host interface is being read on storage device interface 207 of mobile terminal 103, as shown in Figure 3 of Iguchi. (Ans. 11, ¶2; *see also* FF 3). However, in the rejection of claim 1, the Examiner finds that “a channel select bit encoder exists *inside* element 120 which selects the virtual channel to be used for communication to take place.” (Ans. 3;emphasis added).

In construing claim 1 in accordance with its plain meaning, we

observe that the preamble recites “A host interface *comprising*: a channel select bit encoder [and] . . . a virtual channel controller coupled to the channel select bit encoder” Thus, the express language of claim 1 requires the host interface to comprise at least the two elements recited in the body of the claim: (1) a channel select bit encoder, and (2) a virtual channel controller.¹

We particularly observe that storage device 120 (FF 2) is a *separate* device which is not contained within or otherwise part of mobile terminal 103. (See FF 1-3). Because the Examiner finds that the claimed channel select bit encoder exists inside storage device 120 (Ans. 3), it cannot be an element contained within or otherwise part of storage device interface 207 (which the Examiner finds is the claimed host interface), as interface 207 is clearly shown contained within the *separate* mobile terminal 103 (FF 3; Fig 3). Iguchi discloses that “storage device interface 207 performs the transmission/reception of the information between the mobile terminal 103 and the storage device 120.” (FF 4). We note that to anticipate, every element and limitation of the claimed invention must be found in a single prior art reference, *arranged as in the claim*. *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383 (Fed. Cir. 2001) (emphasis added).

Here, even if we assume *arguendo* (without deciding) that the claimed “media controller” is met by storage device 120, we nevertheless find the Examiner has failed to show the respective elements of claim 1, arranged as

¹ See e.g., *Genentech, Inc. v. Chiron Corp.*, 112 F.3d 495, 501 (Fed. Cir. 1997) (“Comprising” is a term of art used in claim language which means that the named elements are *essential*, but other elements may be added and still form a construct within the scope of the claim.)(emphasis added).

claimed. We also find Appellant's position is buttressed by the shifting positions of the Examiner during the prosecution regarding how the claimed media controller is met by alternative features of the Iguchi reference, as pointed out by the Appellant on pages 8-9 of the principal Brief.

On this record, we reverse the Examiner's § 102 rejection of independent claim 1 for essentially the same reasons argued by Appellant (App. Br. 7-9), as further discussed above. Because we have reversed the Examiner's rejection of claim 1, we also reverse the Examiner's § 102 rejection of claims 2-4 and 23 which depend directly upon claim 1. Dependent claims 5 and 6 stand rejected under § 103. However, we do not find, nor has the Examiner established, that the cited secondary references cure the deficiencies discussed above regarding Iguchi and claim 1. Therefore, we also reverse the Examiner's § 103 rejections of dependent claims 5 and 6.

Independent Claim 7

For essentially the same reasons argued by Appellant in the Briefs, we also agree that Iguchi fails to disclose "a media controller *comprising a channel select bit decoder* that decodes one or more channel select bits received from a host interface indicating one of a plurality of virtual channels through which the host interface will communicate over a data bus with the media controller" and "*a virtual channel controller* coupled to the channel select bit decoder that decodes the one or more channel select bits and establishes a connection for address-less transfer between the indicated virtual channel of the host interface and a corresponding virtual channel of the media controller selected based on the one or more decoded channel

select bits,” as recited in independent claim 7. (App. Br. 10; emphasis added).

In particular, we find that in the “Response to Arguments,” the Examiner errs by concluding that “in claim 7, the media controller only calls for the channel select bit decoder to be within the media controller, whereas the virtual channel controller only has to be coupled to the media controller and *may be located external to it* (and is the way it is being interpreted).” (Ans. 12; emphasis added).

However, the Examiner is ignoring the term “comprising” in the preamble: “A media controller *comprising*,” (Claim 7). We note that the transitional term “comprising” is synonymous with “including,” “containing,” or “characterized by,” and is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. *See* MPEP 2111.03; *see also* n.1 *supra*.

Thus, the plain language of claim 7 requires “[a] media controller *comprising*: [at least] a channel select bit decoder . . . [and] *a virtual channel controller . . .*” (emphasis added). Because the Examiner incorrectly construes the claim as reading on a virtual channel controller *external* to the media controller (Ans. 12), we conclude that the Examiner’s claim construction is overly broad and unreasonable. Thus, we agree with the Appellant that the Examiner has not established that Iguchi discloses the claimed arrangement. *See Karsten*, 242 F.3d at 1383 (Fed. Cir. 2001).

We again find the Appellant’s position is buttressed by the shifting positions of the Examiner during the prosecution regarding how the claimed media controller is met by alternative features of the Iguchi reference, as pointed out by the Appellant on pages 10-11 of the principal Brief.

Moreover, the Examiner admits that the Iguchi reference has been interpreted *differently* between independent claims 1 and 7. (Ans. 12). Therefore, on this record, we find the weight of the evidence supports the Appellant's position that "the [Examiner's] inconsistent interpretations of the Iguchi reference are mutually exclusive. The media controller of independent claims 1, 7, and 15 cannot be equated with both an unidentified component of mobile terminal 103 of Iguchi and a storage device 120 of Iguchi." (Reply Br. 6).

For these reasons, we reverse the Examiner's § 102 rejection of independent claim 7 for essentially the same reasons argued by Appellant, as further discussed above. Because we have reversed the Examiner's rejection of claim 7, we also reverse the Examiner's § 102 rejection of claims 8-10, 13, 14, and 24 which depend upon claim 7. Dependent claims 11 and 12 stand rejected under § 103. However, we do not find, nor has the Examiner established, that the cited secondary references cure the deficiencies discussed above regarding Iguchi and claim 7. Therefore, we also reverse the Examiner's § 103 rejections of dependent claims 11 and 12.

Independent Claim 15

Claim 15 recites, *inter alia*, "A data storage device comprising: a host interface . . . and[,] a media controller comprising a channel select bit decoder" Thus, claim 15 is directed to a *different* arrangement of elements from those recited in claims 1 and 7

However, in the Answer (pg. 7), the Examiner *does not provide a detailed rejection for claim 15*. Instead, the Examiner merely refers to the rejection of claims 1 and 7 for support: "With regards to claim 15, it is

directed to a data storage device including the combination of the elements recited in claims 1 and 7 above thus due to the claim reciting similar features, it is rejected under the same rationale.” (Ans. 7).

Our reviewing court has guided that the allocation of burdens requires that the USPTO produce the factual basis for its rejection of an application under 35 U.S.C. §§ 102 and 103. *In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984) (citing *In re Warner*, 379 F.2d 1011, 1016 (CCPA 1967)). The one who bears the initial burden of presenting a prima facie case of unpatentability is the Examiner. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). A prima facie case is established when the party with the burden of proof points to evidence that is sufficient, if uncontroverted, to entitle it to prevail as a matter of law. *See Saab Cars USA, Inc. v. United States*, 434 F.3d 1359, 1369 (Fed. Cir. 2006).

Here, the Examiner has not clearly mapped the limitations of claim 15 to the corresponding portions of the Iguchi reference by providing a detailed rejection. (Ans. 7). Thus, on this record, we find speculation is required to ascertain exactly how the Examiner is reading the disputed claimed “host interface” and “media controller” on the Iguchi reference cited on pages 4 and 8 of the Answer.

We are particularly troubled that the Examiner relies on the § 102 rejections of claims 1 and 7 in rejecting claim 15 (Ans. 7), while (in another portion of the Answer) expressly admitting that the Iguchi reference has been interpreted *differently* between independent claims 1 and 7. (Ans. 12-13). We decline to engage in speculation, and we also decline the

Examiner's apparent invitation to the Board to perform *de novo* examination.²

We note that in an *ex parte* appeal, the Board “is basically a board of review — we review . . . rejections made by patent examiners.” *Ex parte Gambogi*, 62 USPQ2d 1209, 1211 (BPAI 2001). “The review authorized by 35 U.S.C. Section 134 is not a process whereby the examiner . . . invite[s] the [B]oard to examine the application and resolve patentability in the first instance.” *Ex parte Braeken*, 54 USPQ2d 1110, 1112 (BPAI 1999).

Thus, on this record, we agree with Appellant that the Examiner has not met the initial burden of presenting a *prima facie* case of anticipation. For essentially the same reasons argued by Appellant (App. Br. 12-13), and for the reasons discussed above regarding claims 1 and 7, we find the weight of the evidence supports the Appellant's position that Iguchi fails to disclose that “the host interface will communicate over a data bus with the media controller” and “a connection for address-less transfer between the indicated virtual channel of the host interface and a corresponding virtual channel of the media controller[,] as recited in independent claim 15.” (App. Br. 12).

For these reasons, we reverse the Examiner's rejection of independent claim 15. Because we have reversed the Examiner's rejection of claim 15,

² *Contra Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010)(“Filing a Board appeal does not, unto itself, entitle an appellant to *de novo* review of all aspects of a rejection. If an appellant fails to present arguments on a particular issue — or, more broadly, on a particular rejection — the Board will not, as a general matter, unilaterally review those uncontested aspects of the rejection.”)(precedential).

we also reverse the Examiner's § 102 rejection of claims 16-18, 21, 22, and 25 which depend upon claim 15. Dependent claims 19 and 20 stand rejected under § 103. However, we do not find, nor has the Examiner established, that the cited secondary references cure the deficiencies discussed above regarding Iguchi and claim 15. Therefore, we also reverse the Examiner's § 103 rejections of dependent claims 19 and 20.

DECISION

We reverse the Examiner's § 102 rejection of claims 1-4, 7-10, 13-18, and 21-25.

We reverse the Examiner's § 103 rejections of claims 5, 6, 11, 12, 19, and 20.

ORDER

REVERSED

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